

MCQ (Linux Operating System)

Q1. Which of the following is a feature of Linux OS?

- A) Open Source
- B) Multitasking
- C) Security
- D) All of the above

Answer: D) All of the above

Q2. Which component of Linux interacts directly with the hardware?

- A) Shell
- B) Kernel
- C) GNU Utilities
- D) Applications

Answer: B) Kernel

Q3. Bash, Zsh, and Dash are types of:

- A) Kernels
- B) Shells
- C) Editors
- D) Utilities

Answer: B) Shells

Q4. Which file type in Linux stores compiled programs?

- A) Text file
- B) Binary file
- C) Directory file
- D) Special file

Answer: B) Binary file

Q5. The Linux Directory Structure follows which standard?

- A) LFS
- B) FHS
- C) POSIX
- D) ISO

Answer: B) FHS

Q6. Which command is used to display the current working directory?

- A) cd
- B) pwd
- C) ls
- D) tree

Answer: B) pwd

Q7. Which command is used to create a new directory?

- A) touch
- B) mkdir
- C) rmdir
- D) cp

Answer: B) mkdir

Q8. Which command is used to remove a file?

- A) rm
- B) mv
- C) cp
- D) touch

Answer: A) rm

Q9. Which command changes file permissions?

- A) chown
 - B) chmod
 - C) chgrp
 - D) umask
- Answer:** B) chmod

Q10. Which command displays currently logged-in users?

- A) who
- B) whoami
- C) man
- D) echo

Answer: A) who

Q11. What does the head command do?

- A) Shows last lines of a file
- B) Shows first lines of a file
- C) Counts words
- D) Compares two files

Answer: B) Shows first lines of a file

Q12. Which command is used to list running processes?

- A) ps
- B) fg
- C) kill
- D) sleep

Answer: A) ps

Q13. Which command schedules a one-time job in Linux?

- A) cron
- B) at

- C) batch
- D) sleep
- Answer:** B) at

Q14. Which command is used to schedule recurring jobs?

- A) at
- B) batch
- C) crontab
- D) sleep
- Answer:** C) crontab

Q15. Which command is used to run a shell script?

- A) run script.sh
- B) ./script.sh
- C) bash script.sh
- D) Both B and C
- Answer:** D) Both B and C

Q16. Which of the following is a wildcard in Linux?

- A) *
- B) ?
- C) []
- D) All of the above
- Answer:** D) All of the above

Q17. What does the > operator do in Linux?

- A) Appends output to a file
- B) Redirects output to a file
- C) Redirects input from a file
- D) None of the above
- Answer:** B) Redirects output to a file

Q18. Which operator is used to combine commands such that the second executes only if the first succeeds?

- A) ||
- B) &&
- C) !
- D) |
- Answer:** B) &&

Q19. Which command is used for arithmetic operations in shell?

- A) expr
- B) \$(())
- C) Both A and B

D) let

Answer: C) Both A and B

Q20. What is the purpose of `test` or `[ ]` command in shell scripting?

- A) File testing
- B) Numeric comparison
- C) String comparison
- D) All of the above

Answer: D) All of the above

Q21. Which command is used for pattern matching using regular expressions?

- A) sed
- B) grep
- C) awk
- D) cut

Answer: B) grep

Q22. Which grep variant supports extended regular expressions?

- A) grep
- B) egrep
- C) fgrep
- D) cut

Answer: B) egrep

Q23. Which command is used for stream editing (search and replace)?

- A) awk
- B) sed
- C) grep
- D) sort

Answer: B) sed

Q24. Which sed command deletes a line containing a pattern?

- A) sed 's/pattern/' file
 - B) sed '/pattern/d' file
 - C) sed 'i pattern' file
 - D) sed 'p pattern' file
- Answer:** B) sed '/pattern/d' file

Q25. Which command inserts a line using sed?

- A) sed 's/pattern/new/'
- B) sed '/pattern/i new_line'
- C) sed 'd pattern'
- D) sed 'p pattern'

Answer: B) sed '/pattern/i new_line'

Q26. Which Linux shell is known for high customization and plugins?

- A) Bash
- B) Zsh
- C) Dash
- D) KornShell

Answer: B) Zsh

Q27. Which of the following is NOT a Linux file type?

- A) Text file
- B) Binary file
- C) Database file
- D) Special file

Answer: C) Database file

Q28. What is the main role of the Kernel in Linux?

- A) Provides user interface
- B) Manages hardware and system resources
- C) Executes shell scripts
- D) Edits text files

Answer: B) Manages hardware and system resources

Q29. Which directory contains system configuration files?

- A) /bin
- B) /etc
- C) /usr
- D) /home

Answer: B) /etc

Q30. Which command lists all files, including hidden files?

- A) ls
- B) ls -l
- C) ls -a
- D) tree

Answer: C) ls -a

Q31. Which command is used to copy files?

- A) mv
- B) cp
- C) rm
- D) touch

Answer: B) cp

Q32. What does `chmod 755 file` do?

- A) Gives read, write, execute to all
- B) Gives read/write to owner, read/execute to others

- C) Gives execute permission only
- D) Removes all permissions

Answer: B) Gives read/write/execute to owner, read/execute to others

Q33. Which command is used to check the manual of other commands?

- A) man
- B) info
- C) help
- D) all of the above

Answer: D) all of the above

Q34. What is the function of `uniq` command?

- A) Sorts lines
- B) Displays unique lines only
- C) Reverses file content
- D) Counts words

Answer: B) Displays unique lines only

Q35. Which command brings a background job to the foreground?

- A) ps
- B) fg
- C) bg
- D) kill

Answer: B) fg

Q36. Which metacharacter is used for command substitution?

- A) `$ ( . . . )`
- B) `*`
- C) `|`
- D) `>`

Answer: A) `$ ( . . . )`

Q37. Which loop executes at least once even if the condition is false?

- A) for
- B) while
- C) until
- D) do-while

Answer: D) do-while

Q38. Which logical operator executes the second command if the first fails?

- A) `&&`
- B) `||`
- C) `!`
- D) `;`

Answer: B) `||`

Q39. How do you comment a line in a shell script?

- A) // comment
- B) # comment
- C)
- D) /* comment */

Answer: B) # comment

Q40. Which command is used to create an empty file?

- A) touch
- B) cat
- C) cp
- D) echo

Answer: A) touch

Q41. Which grep option ignores case while searching?

- A) -i
- B) -v
- C) -c
- D) -n

Answer: A) -i

Q42. Which fgrep command searches for fixed strings without interpreting regex?

- A) fgrep "pattern" file
- B) grep -E "pattern" file
- C) egrep "pattern" file
- D) sed 's/pattern//' file

Answer: A) fgrep "pattern" file

Q43. Which sed command substitutes the first occurrence of a pattern on a line?

- A) sed 's/pattern/replacement/' file
- B) sed 's/pattern/replacement/g' file
- C) sed '/pattern/d' file
- D) sed 'i new_line' file

Answer: A) sed 's/pattern/replacement/' file

Q44. Which command counts the number of lines, words, and characters?

- A) wc
- B) head
- C) tail
- D) sort

Answer: A) wc

Q45. Which command extracts specific columns from a file?

- A) cut
- B) grep

C) sed

D) awk

Answer: A) cut

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